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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,293

12/20/2005

Robert Heimbach

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10/30/2008

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PATENT DEPARTMENT
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EXAMINER

NAM, JUNG HUN

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,293	Applicant(s) HEIMBACH ET AL.	
	Examiner JUNG H. NAM	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-100 is/are pending in the application.
- 4a) Of the above claim(s) 73-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 50-72, 99, and 100 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I claims 50-72, 99, and 100 in the reply filed on 7/14/2008 is acknowledged. Further restriction is necessary on the elected claims and is presented below.

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 50, 51, 72, and 100, drawn to a method for control of an electrophotographic printer or copier wherein the system time is predetermined by a timer with help of a counter that counts a clock signal with a constant frequency.

Group II, claim(s) 50, 52, 53, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein the sensor comprises a light barrier or a swing arm switch by which a sensor signal is output upon arrival of a sheet edge.

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Group III, claim(s) 50, 54, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein sensor comprises a feedback device of an actuator by which a sensor signal is output upon reaching a predetermined actuator position.

Group IV, claim(s) 50, 55, 56, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein the actuator comprises a step motor or a valve.

Group V, claim(s) 50, 57, 64, 65, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein calculation processes are executed in parallel by at least one of the control units.

Group VI, claim(s) 50, 57, 64, 66, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein calculation processes are executed by a controller as tasks in a multitasking operation.

Group VII, claim(s) 50, 57, 64, 67, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein a timeslot is associated with each calculation process, the calculation processes being executed by a controller in succession in the timeslots.

Group VIII, claim(s) 50, 57, 64, 68, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein an operating system of a controller controls execution of the calculation processes.

Group IX, claim(s) 50, 58, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein the control units have a same time normal.

Group X, claim(s) 50, 59, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein a synchronization signal via which internal time control units of the control units are synchronized is supplied to the control units.

Group XI, claim(s) 50, 60, 61, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein at least two sensors and at least two actuators are provided, whereby a sensor calculation process is associated in the control unit with each sensor for monitoring and evaluation of the sensors, and an actuator calculation process is associated in the control unit with each actuator for activation of the actuators.

Group XII, claim(s) 50, 60, 62, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein a time control calculation process is provided in the control unit via which the desired points in time are compared with a real point in time, and via which a signal is output upon reaching or exceeding the desired point in time.

Group XIII, claim(s) 50, 60, 63, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein at least two desired points in time are compared with the real point in time upon implementation of the time control calculation process.

Group XIV, claim(s) 50, 69, 70, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein the signal comprises an interrupt signal.

Group XV, claim(s) 50, 69, 71, 72, and 100 drawn to a method for control of an electrophotographic printer or copier wherein the desired points in time are sorted in the

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storage according to their temporal sequence, only temporally next desired points in time being compared with the real point in time.

Group XVI, claim(s) 99, drawn to a method for control of an electrophotographic printer or copier comprising the step of providing a system time of the printer or copier that is independent of the transport path of the individual sheet.

The inventions listed as Groups I- XVI do not relate to a single general inventive concept under PCT rule 13.1 because under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the common features of the groups, specifically, those features of claim 50, 72, 99, and 100 are known in the art. They are found, for example in the abstract of Machine Japanese Publications 08-036282 A and Soler US Pat. No. 5,489,969. Therefore, a lack of unity exists a posteriori, and restriction is proper.

1. Inventions I thru XVI are directed to related products and processes. The related inventions are distinct if: (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed have a materially different design, mode of operation, function, or effect as evidenced by the mutually exclusive features identified above. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Claim 50 links inventions I – XV. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claims, claim 50. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

2. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;

- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNG H. NAM whose telephone number is (571)270-5285. The examiner can normally be reached on Monday to Friday 8:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jung H Nam/
Examiner, Art Unit 2854

/J. H. N./
Examiner, Art Unit 2854

/Ren L Yan/
Primary Examiner, Art Unit 2854